

P21932.A07

IN THE SPECIFICATION

Please replace paragraph [0019] of the specification with the following:

[0019] A polycrystalline diamond layer 1 with a thickness of $250\ \mu\text{m}$ is deposited on an auxiliary substrate using hot-filament CVD. After removing the auxiliary substrate, a tungsten layer 2 with a thickness of $6\ \mu\text{m}$ is deposited on this diamond layer using physical vapor deposition (PVD). The tungsten layer covers the diamond layer completely. The x-ray source is mounted in the housing ~~(4)~~ 4 of a commercial x-ray microscope by a clamp 3, with sealing washers ~~14~~ 5 being used to ensure a stable vacuum. The Figure shows this microfocus source in installed condition. X-radiation $h\nu$ is produced by localized bombardment of the x-ray anode with electrons e^- . The maximum achievable radiation density is measured with this x-ray anode. If the diamond layer is replaced with a $500\ \mu\text{m}$ thick beryllium layer under otherwise identical conditions, the radiation density of the x-radiation produced is reduced by a factor of 4. With a diamond layer thickness of likewise $500\ \mu\text{m}$, the radiation density achievable with the x-ray anode according to the invention would be even better, due to the improved heat dissipation.